# Teacher Retention and Turnover Research

**Research Update 4: How Do Teachers Compare To Nurses And Police Officers?**

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# Contents

# About this research

## How does the teaching profession compare to other large public sector professions?

In this Research Update, we examine how full-time teachers compare to full-time nurses and police officers, two of the other large and important public sector professions in England. We compare the characteristics of each profession's workforce, their hours worked, earnings, and job satisfaction. Our analysis of Understanding Society survey data shows that teachers are consistently working more hours per week during term time than nurses and police officers. Average annual earnings for teachers exceed those of nurses (but are less than police), but after adjusting for annual hours worked (taking account of school holidays), teachers and nurses have similar levels of average hourly pay. Our research also finds that despite the background of falling real-terms pay and longer working hours, nearly four in five teachers say they are satisfied with their jobs and income levels, although fewer than half report they are content with the amount of leisure time they have.

This Research Update is the fifth publication in a major research project by the National Foundation for Educational Research (NFER), which is funded by a grant from the Nuffield Foundation. The project aims to gain a deeper understanding of the dynamics within the teacher workforce in England. The study will inform policy makers and system leaders to help formulate effective responses to this complex issue and meet the challenge of increasing demand for teachers. We have already published some evidence-based outputs, which provide insights about where policy interventions and practice might usefully focus. The first two Research Updates presented differences in teacher retention rates by the subject they teach and explored teacher redeployment within multi-academy trusts. Our Interim Report explored factors associated with teacher retention and turnover, and offered recommendations for policy makers on how to improve retention. In our most recent Research Update, we looked at the motivations of teachers who leave the profession.

## National Foundation for Educational Research

NFER is a leading independent provider of rigorous research and insights in education, working to create an excellent education for all children and young people. We are a not-for-profit organisation and our robust and innovative research, assessments and other services are widely known and used by key decision-makers. Any surplus generated is reinvested in projects to support our charitable purpose.

## Nuffield Foundation

The Nuffield Foundation is an endowed charitable trust that aims to improve social wellbeing in the widest sense. It funds research and innovation in education and social policy and also works to build capacity in education, science and social science research. The Nuffield Foundation has funded this project, but the views expressed are those of the authors and not necessarily those of the Foundation. More information is available at www.nuffieldfoundation.org.

How does the teaching profession compare to other large public sector professions? What do we know about their average earnings, the hours they work and their levels of job satisfaction? We use data from the Understanding Society survey to compare teachers with nurses and police officers.

Our analysis shows that despite working the joint highest number of hours annually and having the joint lowest average hourly pay, teachers remain satisfied with their jobs and incomes. However, there is a lot of dissatisfaction with the amount of leisure time they have, which may be affecting retention.

# Key findings and conclusions

## There are significant differences in the make-up of the three professions

Our analysis of Understanding Society (USoc) survey data shows that the teaching and nursing workforces are dominated by women, who make up 72 and 89 per cent of the respective workforces. By contrast, the policing profession is male-dominated with a quarter of staff being women.

Nurses have the highest average age at 44 years old, followed by teachers (42) and police officers (40). The age profiles differ too: teachers have a flatter age distribution than nurses and police officers, with the workforce fairly evenly split across age groups. The age distributions for nurses and police officers are skewed towards older workers. This suggests that these professions may need to attract greater numbers of new recruits to their professions in the next five to ten years as older nurses and police officers start to retire.

Of the three professions, nursing has the largest proportion of part-time workers at 29 per cent, compared to 16 per cent for teachers. This may partly be due to the shift work nature of nursing, which makes it easier to accommodate in rotas. Only four per cent of police officers work part-time.

## Teachers work similar hours to police officers each year, but in fewer weeks

We compare the average number of hours worked by full-time staff in each profession and monitor how this has changed over time. Our analysis shows that in 2015/16, the most recent year of USoc, teachers work the longest hours at 50 hours per week during term time, followed by police officers (44) and nurses (39). Working long hours over prolonged periods, as teachers are doing, can create pressure and stress, with potential negative effects on health and well-being.

Looking at the total hours worked by each profession annually, making assumptions about the hours teachers may be working during school holidays, we find that teachers and police officers work a comparable number of hours annually. Teacher working hours have been increasing since 2009/10, while police officer working hours have decreased slightly over the same period, though neither difference is statistically significant.

We also show that the long hours that teachers work during term time substantially exceeds the amount of extra holiday time they may receive.

## Teachers' real average hourly pay has fallen more than it has for the other professions since 2009/10

Public sector workers have faced a succession of pay freezes or pay increases that are capped at one per cent since 2010, which has eroded real-terms pay. As a consequence, each profession has seen a reduction in real-terms earnings across this period.

After accounting for the estimated total number of hours worked each year, teachers have a real average hourly pay rate of £17.70 per hour, which is about the same rate as nurses. By comparison, police officers' real average hourly pay is £18.80 per hour.

We also find that teachers' real average hourly pay has decreased by 15 per cent since 2009/10. Over the same period, real average hourly pay has fallen by four and 11 per cent for nurses and police officers, respectively.

There are also differences between the professions regarding overtime worked. Nurses and police officers may be paid for overtime worked (although not all of this is paid). In contrast, teachers are required to work such hours as necessary to undertake their professional duties.

## Despite this, teachers seem to be satisfied with their jobs and income, but less so with their leisure time

Our analysis shows that despite a background of falling real-terms hourly pay and longer working hours, 78 per cent of full-time teachers say they are satisfied with their jobs in 2015/16. This is slightly lower than full-time nurses' job satisfaction rates, but much higher than for full-time police officers. Perhaps more surprisingly, 79 per cent of teachers say they are satisfied with their income in 2015/16, despite falling real-terms pay. Nurses and police officers are less satisfied with their income levels than teachers. But only 47 per cent of teachers say they are satisfied with their amount of leisure time in 2015/16, the lowest of the three professions, while 43 per cent say they are dissatisfied.

This is a matter for concern, as workload is a big issue for teachers. More teachers leave state funded schools each year than nurses and police officers leave their professions. One reason may be the need to continually have to work a large number of hours to keep up with the job demands. This is consistent with our previous report, which identified that teachers who leave appear to be motivated by reduced working hours and more flexible working opportunities. Further work to reduce the hours worked by teachers should be a priority for school leaders and the Government.

# Why is it important to compare teaching to other professions?

One of the difficulties facing any discussion about teacher supply is knowing whether the difficulties faced are unique to teaching or common to other professions. For example, is a ten per cent rate of teachers leaving the state funded sector each year relatively high or low compared to similar professions? Many of the recruitment and retention challenges facing the teaching profession are also likely to be relevant for other public sector professions, especially the effect that more or less buoyant labour market conditions might have. Different professions may also face more of a challenge recruiting in some geographical regions or particular types of role within the profession (for example, teachers in certain subjects, or nurses for certain specialisms).

There has been relatively little research conducted which compares retention across different public sector professions. However, a NatCen Social Research report (Wishart and Smith, 2017) used the Labour Force Survey (LFS) to compare earnings and living standards of secondary school teachers, police, nurses and firefighters between 2010 and 2016. This showed that all professions had seen a decrease in their real-terms earnings, but the largest fall had been experienced by teachers, who were approximately £4,000 worse off in 2016 compared with 2010.

In 2017, UCL and NIESR used the Annual Survey of Hours and Earnings and LFS to look at wage growth in pay review body[1] (PRB) professions compared to similar non-PRB professions between 2005 and 2015 (Bryson and Forth, 2017). This found that earnings growth varies markedly across PRB occupations, even those whose pay is set by the same PRB. After netting off changes in workforce composition over time, the report found that nurses' median real gross hourly earnings grew by 8.6 per cent during the 10 year period, compared to teachers at 0.8 per cent and police officers, who saw a decrease of 6.9 per cent.

We build on this research by using the USoc survey to compare full-time teachers with full-time nurses and police officers. In this Research Update, we examine the characteristics of each profession, their earnings and hours worked, their job and life satisfaction, and the retention rates in each profession. In our next and final report, we will build on this further and

examine what policy solutions have been applied in the other professions to tackle any supply issues, which could be relevant to the teaching profession.

## The Understanding Society survey

USoc is the largest longitudinal household survey in the UK, based on a sample of 40,000 households. Every individual in the household is interviewed and subsequently tracked across eight years (2009-2017), even if they move house or form a new household during this time. The survey contains extensive data on individuals' employment, education, family life, health and well-being, as well as linking to the characteristics of other individuals within the household. We identify 1,197 individuals who were, at some point across the seven waves of data, teachers in a school in England's state sector.

We compare and contrast the characteristics, earnings, working hours and satisfaction of teachers with that of public sector nurses and police officers in England. We identify 752 nurses and 198 police officers for comparison. We focus our analysis of earnings, working hours and wages on the sub-sample of each profession who work full-time, to enable us to draw consistent comparisons. The Appendix describes our approach for defining teachers, nurses and police officers from the data. We chose nursing and policing as comparators as they are public sector professions facing somewhat similar workforce challenges to teaching. They are also occupations with large numbers of workers, which means the sample size in the USoc data is large enough for robust comparative analysis.

We use cross-sectional sampling weights in our analysis, which take account of unequal selection probabilities, differential non-response, and potential sampling error. Using statistical weights means that the findings are representative of the general population. We compare the characteristics of the USoc sample of teachers with data from the School Workforce Census (SWC) to check whether the two samples are similar. We find that individual characteristics are reasonably well balanced, although older teachers are slightly over-represented in the USoc data and the leaving rate is higher in the USoc data than in the SWC (see the Appendix for comparison table).

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[1] Pay Review Bodies make recommendations to the Government about pay in a range of professions in the publicly-funded health, education, justice and policing sectors.

# How do the main characteristics of the three professions compare?

We use USoc data to compare the main characteristics of the three professions. While other profession-specific data sources exist which measure their own workforce more comprehensively, USoc enables us to compare the three professions on a consistent basis using common data items. See the Appendix for a comparison of teacher characteristics based on USoc and the SWC.

## Teaching is more similar to nursing in terms of the gender profile

The teaching and nursing workforces are dominated by women, who account for 72 and 89 per cent of their workforces respectively. Conversely, men make up a greater share of the policing workforce (75 per cent).

## Teaching has a flatter age distribution than nursing and policing

Our analysis shows that nurses are the oldest on average, with an average age of 44 years old, followed by teachers (42 years) and police officers (40 years). Part of the reason that the police are younger on average may be due to the physical demands of their role. It may also be due to the police pension scheme that was in place up to 2006, where police officers could retire on a full pension at the age of 50 if they had served at least 30 years.
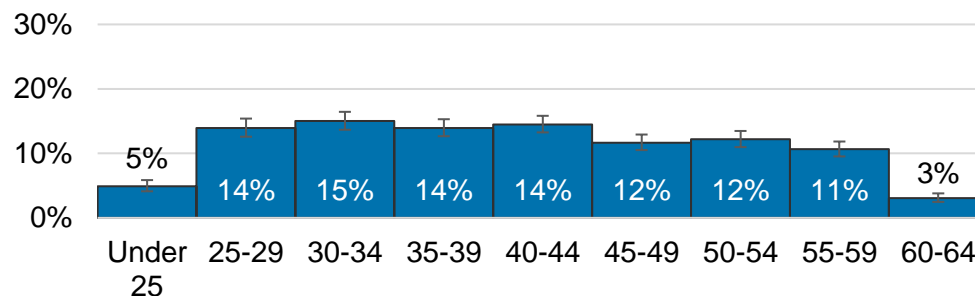
The age distributions also differ substantially. The full-time teacher workforce is fairly evenly distributed, with a slight decline for older age groups. Conversely the nursing workforce is skewed towards older nurses, with about a third being aged 50 or older, which are likely to need to be replaced in the next five to 10 years. This could be challenging for the profession given the relatively low numbers of young nurses entering the profession. For police officers, nearly half of the workforce are aged 40 to 49. Many of these officers are likely to have joined the police prior to the 2006 pension changes, so could be planning to retire in the next five to 10 years when they have completed their 30 years' service. Although police numbers have declined in recent years and the work of police officers is shifting in focus, the profession may face a similar challenge to the nursing profession to recruit new police officers or retain current staff to replace those who are likely to retire.

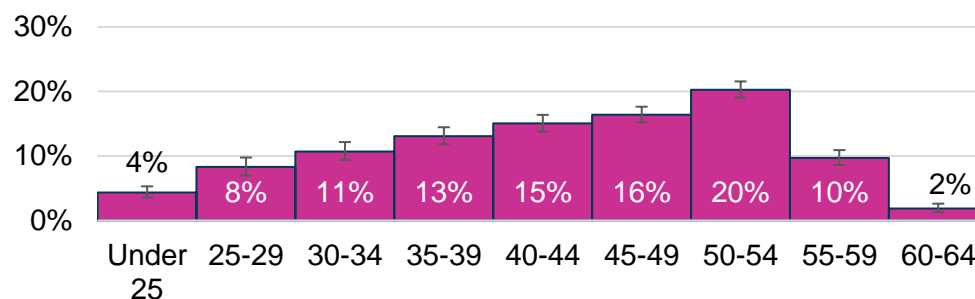## More nurses work part-time than teachers, but fewer police officers do

Our analysis of USoc also finds differences in the proportion working part-time. Nurses are more likely to work part-time than teachers, with 29 per cent compared to 16 per cent of the teaching workforce. Police officers (four per cent) are less likely than both nurses and teachers to work part-time. These comparisons do not take account of differences in age and gender between the professions, which are likely to be important drivers of the differences in part-time working. However, even after accounting for these differences, a higher proportion of nurses work part-time compared to teachers and a slightly lower proportion of police officers work part-time compared to teachers.
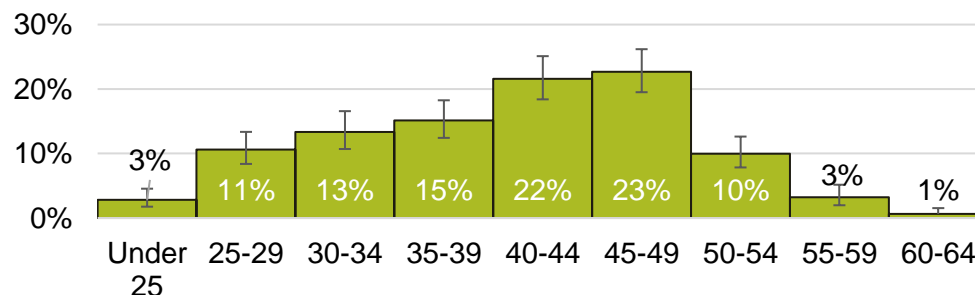


**Age profile of full-time teachers**

Under 25: 5%, 25-29: 14%, 30-34: 15%, 35-39: 14%, 40-44: 14%, 45-49: 12%, 50-54: 12%, 55-59: 11%, 60-64: 3%

**Age profile of full-time nurses**

Under 25: 4%, 25-29: 8%, 30-34: 11%, 35-39: 13%, 40-44: 15%, 45-49: 16%, 50-54: 20%, 55-59: 10%, 60-64: 2%

**Age profile of full-time police officers**

Under 25: 3%, 25-29: 11%, 30-34: 13%, 35-39: 15%, 40-44: 22%, 45-49: 23%, 50-54: 10%, 55-59: 3%, 60-64: 1%

# How do working hours compare across the professions?

## Teachers work much longer hours during term time

We use USoc data to examine the number of reported hours worked by teachers, nurses and police officers. The top chart shows that teachers report working 50 hours per week during term time in 2015/16, which is more than nurses and police officers work per week[2]. The chart also shows that teacher working hours have increased since 2009/10, although this increase is not statistically significant. Working long hours over prolonged periods, as teachers are doing, can create pressure and stress, with potential negative effects on health and well-being.

## Teachers work similar hours each year to police officers, but in fewer weeks

Teachers have more time when pupils are on school holidays, which should be taken into account when comparing professions. We account for this by calculating the number of hours worked annually by each profession, making assumptions about the time teachers work during school holidays (see the Appendix for details of our method).
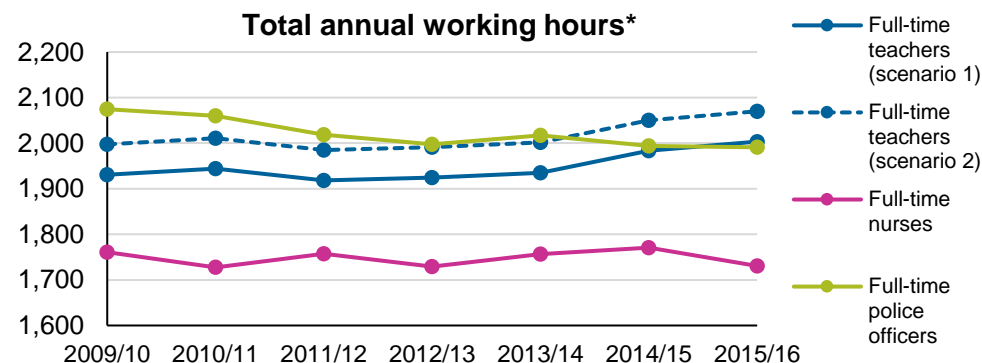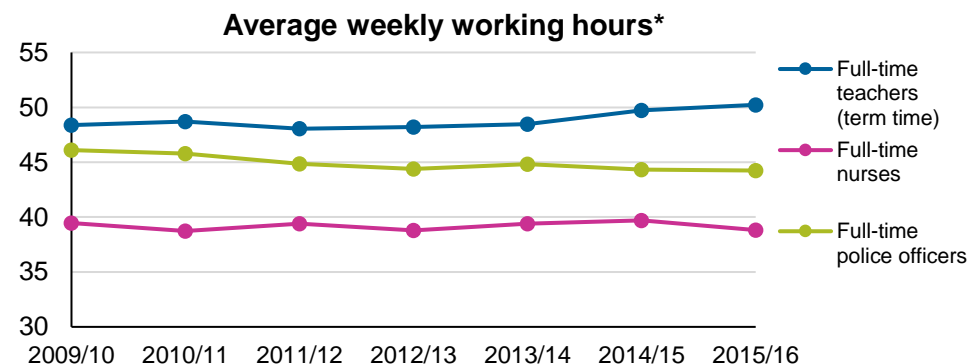
Looking at the bottom chart, we find that teachers and police officers work a comparable number of total hours a year in 2015/16. This has not always been the case. In 2009/10, police officers worked a lot more hours annually, but teacher working hours have been increasing since then while police officer working hours have decreased slightly over the same period. While neither change in total hours worked since 2009/10 is statistically significant, the gap between the two professions has closed completely.

There are also differences in the way teachers and police officers accumulate their annual hours - teachers work more intensively across fewer weeks in the year, whereas police officers accumulate their working hours over a longer time period.

As we do not know from established sources how many hours teachers work during school holidays, we present two scenarios. The first scenario assumes teachers work the day before and day after each term starts/ends[3] (see the solid blue line in the bottom chart). In our second scenario, we assume teachers work for three weeks during the school holiday period (see the dotted blue line in the bottom chart). Under this scenario, teachers work 80 hours more a year than police officers, which is equivalent to nearly two extra hours per week.

## Teachers work long hours even after accounting for extra holidays

It is often said that because teachers get longer holidays than other professions, this makes up for the hours they work during term time. However, it is the case that the hours that teachers work during term time substantially exceeds the amount of extra holiday time they may receive, even if they do not work during the holidays. We find that full-time teachers work the equivalent of 45 per hours per week if spread across the number of weeks worked by full-time nurses and police officers annually, which is more than both of these professions.



**Average weekly working hours***

Full-time teachers (term time)
Full-time nurses
Full-time police officers



**Total annual working hours***

Full-time teachers (scenario 1)
Full-time teachers (scenario 2)
Full-time nurses
Full-time police officers

* Includes overtime hours worked for nurses and police officers

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[2] We assume teachers report their usual working hours in a typical working week in the survey, and do not make a pro-rata adjustment to include school holidays.

[3] Under this assumption, teachers work 40.2 weeks per year compared to 44.6 weeks for nurses and 45 weeks for police officers – see the Appendix for more details.

# How does pay compare across the professions?

## Average gross annual pay has decreased in each profession

The United Kingdom has been through a period of austerity since 2010, during which the Government has sought to reduce public sector spending to decrease the size of the budget deficit. Between 2010 and 2017, public sector workers have faced a succession of pay freezes or below-average earnings pay increases, which has eroded their real-terms pay. Using data from the USoc survey, the chart below shows that the average annual pay, after adjusting for inflation, has declined over the period for all three professions. Police officers have had a 15 per cent decrease in their pay, followed by teachers (12 per cent) and nurses (5 per cent). These comparisons do not account for changes in the composition of each workforce, which may also affect pay. For example, the teacher age distribution has shifted away from older age groups since 2010, and this group tend to have higher pay on average, due to greater experience.

**Average gross annual pay (£), 2017 prices***
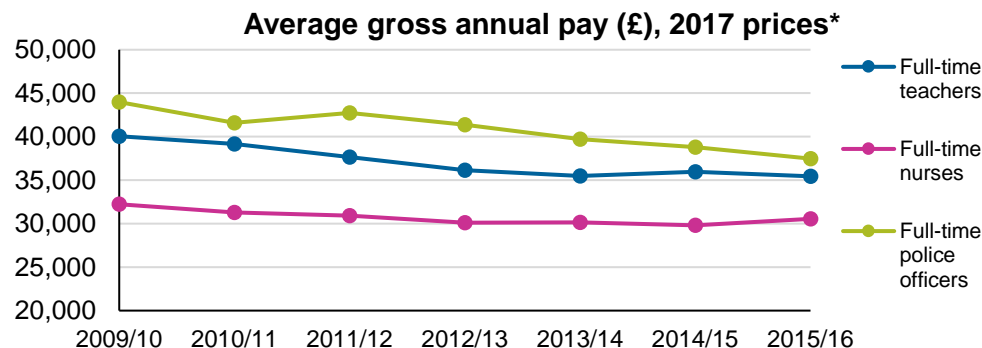


## Teachers' real average hourly pay has decreased most since 2009/10

Full-time police officers have the highest annual earnings in 2015/16, which is £37,500 in 2017 prices, followed by teachers (£35,400) and nurses (£30,500).

However, does this change when we take account of the hours worked? We calculate average annualised hourly wage levels, which take account of the total number of hours worked by each profession each year. Under our first scenario, where we assume teachers work the day before and after each term starts/ends, we find their real average hourly pay is £17.70 per hour in 2015/16 (see the solid blue line in the following chart). This is about the same amount as nurses, but lower than police officers (£18.80 per hour).

However, for the second scenario, where we assume teachers work three weeks during the school holidays, we estimate their real average hourly pay to be £17.10 per hour in 2015/16 (see dotted blue line in the chart below). In this scenario, it would mean teachers work the most hours per year of the three professions, but have the lowest real average hourly pay.

We also find that teachers' real average hourly pay has decreased by 15 per cent since 2009/10. Police officers had have an 11 per cent reduction over the same time period, while nurses' real average hourly pay has fallen by four per cent.

**Average gross annualised pay per hour (£), 2017 prices***
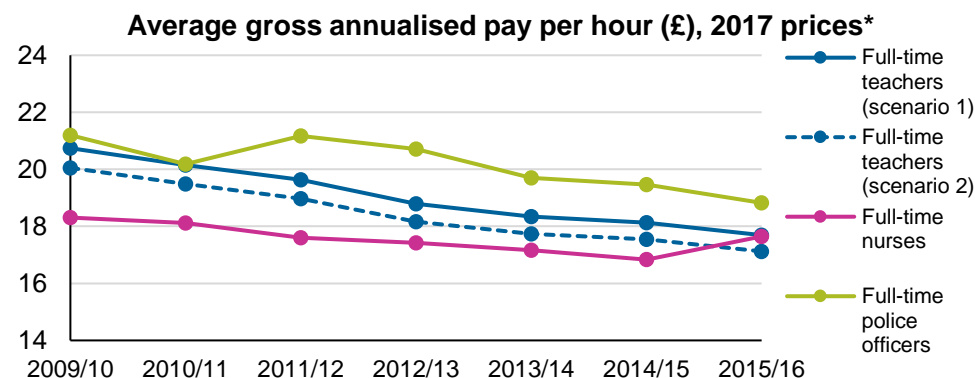


\* Includes overtime hours worked for nurses and police officers

## Nurses and police officers may be paid for overtime worked

According to USoc, nurses report they work on average $3\frac{1}{3}$ hours of overtime per week while police officers work on average 4½ hours of overtime. In contrast, according to the School teachers' pay and conditions document 2017, "Teachers must work such reasonable additional hours as may be necessary to enable the effective discharge of their professional duties". There is no provision set out in this document for overtime payments to teachers.

While nurses and police officers may be paid for their overtime, our analysis shows that they do not get paid for all of the extra hours they work. Full-time police officers are most likely to be paid overtime, with nearly two-thirds of their extra hours being paid. Full-time nurses report that 42 per cent of the overtime hours they work are paid for.
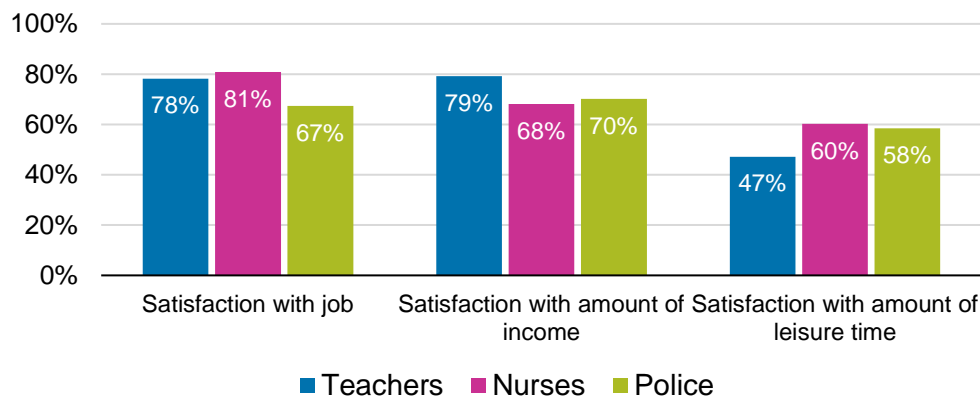
# How do leaving rates and job satisfaction compare?

## Teachers are generally satisfied with their job and income, but not their amount of leisure time

Despite a background of falling real-terms pay and longer working hours, 78 per cent of teachers report that they are satisfied with their jobs in the most recent wave of USoc (2015/16). This is lower than nurses (81 per cent) but higher than police officers (67 per cent), though neither difference is statistically significant. Job satisfaction rates for teachers were at or above 80 per cent in the first two waves of USoc, but they dipped to a low of 75 per cent before partially recovering in the two most recent years. By comparison, nurses' job satisfaction has been variable since 2009/10, ranging between 71 and 86 per cent, while police officers' job satisfaction has declined steadily since 2009/10 before recovering slightly in the last two years.

Perhaps more surprisingly, in the context of falling real-terms pay, 79 per cent of teachers in 2015/16 USoc say they are satisfied with their income, higher than both nurses and police officers though again not statistically significant. Furthermore, after years of falling income satisfaction among teachers, this has been increasing and is now higher than at any point since it has been measured using USoc data. This increase may in part be due to dissatisfied teachers deciding to leave the profession. It may also be because teachers assess their absolute pay level rather than considering its decline in real-terms value or as an hourly rate.

Of greater concern for school leaders and policy makers might be teachers' level of satisfaction with the amount of their leisure time which, at 47 per cent satisfaction in 2015/16, is the lowest of the three professions although the differences are not statistically significant. While leisure satisfaction has recovered somewhat in the last two years, this may again be due to dissatisfied teachers deciding to leave the profession.

## Teachers are more likely to leave than other professions

Our analysis shows that, despite reporting relatively strong job and income satisfaction rates, teachers are more likely to leave their profession than nurses or police officers (see chart below). There is a statistically significant difference between the leaving rates for teachers and police officers, but not for teachers and nurses. There are likely to be a number of factors why the leaving rates between the professions vary, some of which are general (e.g. do teachers have a greater number of alternative options in the labour market?) and some profession-specific (e.g. the nature of contracts, pension arrangements, the policy environment they are working in).

However, the need to continually have to work a large amount of additional hours to keep up with the demands of the job may be one explanation. Indeed, this is consistent with our previous findings, which identified that teachers who leave appear to be more motivated by reduced working hours and more opportunities for flexible working. Further work to reduce the number of hours worked by teachers should be a priority for school leaders and the Government.

### Comparison of satisfaction levels for full-time professionals in 2015-16



### Proportion of full-time staff leaving their profession per year
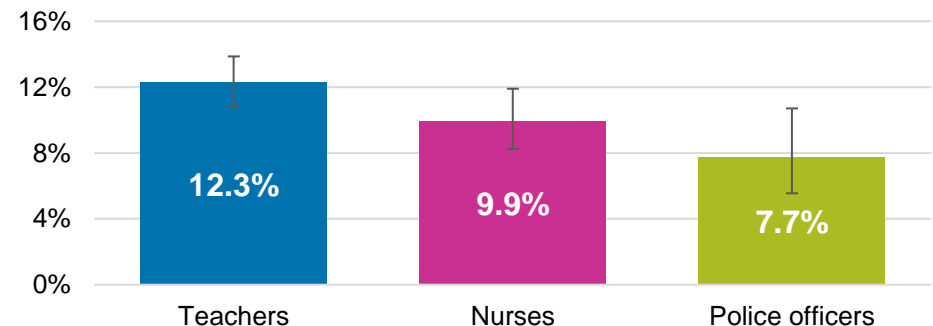
# What next for this research?

## Diagnostic analysis of teacher retention and turnover patterns on the workforce

This research project aims to gain a deeper understanding of the dynamics within the teacher workforce in England. The study will inform policy makers and system leaders to help formulate effective responses to this complex issue and meet the challenge of increasing demand for teachers. The research project will be in two stages, which will each explore different aspects of the teacher labour market.

## Teacher workforce dynamics in the school sector

In the first stage of the project, we analysed data from the SWC to determine the key factors associated with teachers leaving the profession and moving within the sector in England. The Interim Report was published in October 2017.

## Teacher labour market behaviour and comparisons with other professions

We are now in the second stage of the project and are undertaking new statistical analysis using data from the USoc survey to examine the external and personal factors that are associated with teacher labour market behaviour. Using data analysis and stakeholder interviews, we will draw comparisons between teaching and other public sector professions, particularly nursing and policing. A final report will be published in summer 2018.

Find out more about this project and sign up to receive reports when they are available at: www.nfer.ac.uk/research/teaching-workforce-dynamics/.

This project is being funded by the Nuffield Foundation, but the views expressed are those of the authors and not necessarily those of the Foundation.

# Appendix

## Definition of professions in Understanding Society

Our analysis sample of teachers includes individuals whose main job was teaching in the English state school sector in at least one of the seven waves of data available. Our definition closely follows the one we used in our analysis of LFS data in the *Should I Stay or Should I Go?* report, considering the industry each individual work in, their occupation, their country of work, and whether they work in the public or private sector. We define our sample of teachers as teachers employed in England's state-funded schools (consistent with the SWC) as those with:

- Industry = "Primary education" or "General secondary education"
- Occupation = "Primary and nursery education teaching professionals" or "Secondary education teaching professionals" or "Special needs education teaching professionals" or "Senior professionals of educational establishments"
- Country of work = "England"
- Sector = "Public".

We took a similar approach to define nurses and police officers. We define our sample of **nurses** as:

- Industry = "Hospital activities" or "Medical nursing home activities" or "General medical practice activities" or "Specialists medical practice activities" or "Other human health activities" or "Residential nursing care facilities"
- Occupation = "Nurses"
- Country of work = "England"
- Sector = "Public".

We define our sample of **police officers** as:

- Industry = "Public order and safety activities"

- Occupation = "Police officers (inspectors and above)" or "police officers (sergeant and below)"
- Country of work = "England"
- Sector = "Public".

## Contracted hours and leave entitlements for the three professions

### Teachers

Teachers have a different type of contract to nurses and police officers. According to the School teachers' pay and conditions document 2017, a teacher employed full-time must be available for work for 195 days, of which:

a) 190 days must be days on which the teacher may be required to teach pupils and perform other duties;

b) 5 days must be days on which the teacher may only be required to perform other duties; and

those 195 days must be specified by the employer or, if the employer so directs, by the headteacher.

The School teachers' pay and conditions document 2017 also says that:

- a teacher employed full-time must be available to perform such duties at such times and such places as may be specified by the headteacher for 1265 hours, those hours to be allocated reasonably throughout those days in the school year on which the teacher is required to be available for work;
- All teachers who participate in the teaching of pupils are entitled to reasonable periods of Planning, Preparation and Assessment (PPA) time as part of their 1265 hours to enable the discharge of the professional responsibilities of teaching and assessment.
- In addition to the hours a teacher is required to be available for work as set out above, a teacher must work such reasonable additional hours as may be necessary to enable the effective discharge of their professional duties, including in particular planning and preparing courses and lessons; and

assessing, monitoring, recording and reporting on the learning needs, progress and achievements of assigned pupils.

School governors and headteachers should also ensure that they adhere to the working limits set out in the Working Time regulations 1998.

The School teachers' pay and conditions document 2017 does not specify any official leave entitlement for teachers. There are 13 weeks per year when schools are closed to pupils and teachers are expected to take their holidays during these periods. However we do not know from any official sources how much time teachers work during the time when schools are closed to pupils.

## Nurses

According to the Royal College of Nursing website (RCN, 2018), the standard full-time working week for NHS staff is 37.5 hours. All NHS staff in pay bands 1–7 are eligible for overtime payments if they work more than 37.5 hours a week. Senior staff in pay bands 8 and 9 are not entitled to overtime payments. Nurses can request time off in lieu instead of overtime payments if they wish.

The number of days' annual leave and national holidays that nurses are entitled to is dependent on how long they have worked in the NHS. Any previous periods of continuous service in the NHS are also taken into account. Nurses receive:

- 35 days a year for first 5 years of service
- 37 days a year after 5 years' service and
- 41 days a year after 10 years' service

## Police officers

According to the Police Federation Reference Guide (PFEW, 2018), the normal daily period of duty (including an interval for refreshment of 45 minutes) is eight hours for police constables and sergeants. Where variable shift arrangements apply, they should provide for hours of duty equivalent to those of a member with a normal daily period of duty of eight hours, including an interval for refreshment of 45 minutes, and who receives a day's leave on each public holiday and two rest days per week. This is equivalent to a working week of 36.25 hours. Constables and sergeants may potentially be paid overtime payments when certain conditions apply. Inspectors and chief inspectors are not entitled to overtime allowances.

The number of days' annual leave that police officers are entitled to are as follows:

| Years of relevant service | Days of Annual Leave |
| --- | --- |
| Less than 2 | 22 |
| 2 or more | 25 |
| 5 or more | 25 |
| 10 or more | 27 |
| 15 or more | 28 |
| 20 or more | 30 |

Police officers also are entitled to public holidays, but if they are scheduled to work, they receive time off in lieu.

## Comparing the three professions

As teachers have a different sort of contract to nurses and police officers, this makes comparisons between the professions difficult. As noted, full-time teachers' should be available for work for 195 days or 39 weeks a year. They are paid an annual salary, which covers periods when the school is closed to pupils.

As teachers' pay and conditions set out what they are required to do annually, we have annualised the weekly hours and monthly pay of nurses and police officers to aid comparison. To do this, we have used USoc to calculate the average number of hours worked per week including overtime (where this applies) in each year for each profession. We have then assumed the following number of working weeks per year for each profession.

Teachers: We know that full-time teachers are expected to work for 1265 hours over 195 days, which is 39 weeks. However, we do not know from any established sources how many hours/days teachers work in school holidays, so we have presented two scenarios.

(a) The first scenario assumes teachers will work the day before term starts and the day after the term ends, but do not work beyond that during school holidays. This equates to teachers working 40.2 weeks per year.

(b) The second scenario assumes teachers work three weeks during the school holidays, which equates to working 42 weeks per year.

Nurses: As shown on page 5 of this report, the age distribution for nurses is skewed towards older nurses, but we not know from the data whether they have been in the profession all of their working lives. While many nurses are likely to have been in the profession for at least 10 years, we have been conservative and assumed they receive on average 37 days of annual leave and public holidays a year. This means they work 44.6 weeks per year.

Police officers: As shown on page 5 of this report, the age distribution for police officers is also skewed towards older age groups. We know that many police officers join the profession in their early 20s or before, then stay. For this reason, we have assumed police officers have on average 27 days off per year plus eight public holidays (though these may be taken at other times), which is equivalent to working 45 weeks per year.

To calculate the number of hours worked per year for nurses and police officers, we have multiplied their average weekly hours worked including overtime as reported in USoc by the number of weeks worked per year. For teachers, we have multiplied their average total weekly hours worked as reported in USoc by the 39 weeks teachers must be available for work. For the first scenario we present, for the six additional working days (the day before and day after each term starts/finishes) we have assumed teachers work shorter working days of 7.5 hours per day. This is in line with what teaches report in USoc as their normal working hours, which we have interpreted as the time they are actually in school working.  We have also assumed teachers work the same number of hours per day for the three weeks worked during school holidays used in the second scenario.

To calculate annual earnings for each profession, we have multiplied the gross average monthly pay from USoc by 12 months. This includes any overtime pay that nurses and police officers receive for their additional hours worked.

**Representativeness of Understanding Society teacher sample compared to teachers in the School Workforce Census**

| | School Workforce Census | Understanding Society (USoc) | USoc 95% confidence interval (-/+) |
|---|---|---|---|
| Male | 25 | 28 | 1.6 |
| Female | 75 | 72 | 1.6 |
| Age 20-29 | 23 | 17 | 1.4 |
| Age 30-39 | 32 | 29 | 1.6 |
| Age 40-49 | 24 | 25 | 1.5 |
| Age 50-59 | 18 | 24 | 1.5 |
| Age 60 plus | 3 | 6 | 0.8 |
| Primary | 50 | 45 | 1.7 |
| Secondary | 50 | 55 | 1.7 |
| Rate of leaving the profession[4] | 10.4 | 14.1 | 1.4 |
| Full-time | 78 | 84 | 1.3 |
| Part-time[5] | 22 | 16 | 1.3 |
| North East | 5 | 6 | 0.9 |
| North West | 13 | 14 | 1.2 |
| Yorkshire and the Humber | 10 | 9 | 1.0 |
| East Midlands | 8 | 9 | 0.9 |
| West Midlands | 11 | 10 | 1.1 |
| East of England | 11 | 13 | 1.2 |
| London | 16 | 14 | 1.4 |
| South East | 16 | 18 | 1.4 |
| South West | 10 | 8 | 0.9 |

[4] Includes both full-time and part-time teachers
[5] Note that USoc defines part-time working slightly differently to the SWC.

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